

# Size of Farm Units as Affected by the Farming of Additional Land

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## FOREWORD

This study was made in cooperation with the Bureau of Agricultural Economics, United States Department of Agriculture, and The Ohio State University, Columbus, Ohio. The authors were responsible for collecting the data, for compiling and writing this report.

# SIZE OF FARM UNITS AS AFFECTED BY THE FARMING OF ADDITIONAL LAND

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## INTRODUCTION

Requests have been made to the Department of Rural Economics and Rural Sociology of the Ohio Agricultural Experiment Station by the Land Use Planning Committees of several Ohio counties for information concerning the extent to which farmers have been enlarging their farm operations by acquiring additional land. Although the term *farm unit* can be defined in several ways, it is defined in this study as including all land farmed by an operator with the same farming facilities and equipment. A *farm unit* could be altered in size by changing the amount of either labor or capital involved in its operation, but in this study the concern is mainly with the changes effected in the acreage of land per unit during the period from 1937 to 1940 inclusive.

It is interesting that such information was sought at a time when increasing numbers of farm machines were being mounted on rubber tires and when many farm operators were being employed in industry, a situation which often makes available all or part of their land to other farmers. In addition, many older farmers, instead of moving to town at retirement age, as was common formerly, now modernize the farm home and continue to reside there while renting out the fields to younger men.

Purpose of this study was to obtain information concerning the prevalence of the practice of farming additional land and its relation to the trend in size of farming units as measured in terms of acres per farm.

## PROCEDURE AND METHOD<sup>1</sup>

The data were obtained by interviews with farm operators who were asked to indicate, along with supplemental information, all tracts of land which they had farmed in 1937, 1938, 1939, and 1940.

Operators were visited in three sample areas in each of two Ohio Counties during the spring and summer of 1941. This report is concerned with the situation found in Darke County, in western Ohio. A report concerning Hancock County, in northern Ohio, has been prepared,<sup>2</sup> and a summary of the findings in Hancock County is appended.

Each sample area was a block of land in which all or part of 100 farm-operating units were located in 1940. Interviews were begun at a single farm, and a contiguous area was then established by interviewing each adjoining operator until 100 had been visited.

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<sup>1</sup>The authors were assisted in the collection and analysis of the data by H. B. Marshall, Jr. of the Department of Rural Economics and Rural Sociology. Appreciation is also expressed to the representatives of the agricultural agencies in the areas studied for helpful assistance.

<sup>2</sup>Department of Rural Economics and Rural Sociology Mimeograph Bulletin No. 148.

In Darke County, three general areas were selected for sampling. One area was selected in that part of the county where Agricultural Conservation Program records indicated that the greatest combining of farm tracts had occurred since 1937; a second was chosen where a lesser amount had taken place; and a third area was selected where the least had appeared. These areas, in the order just given, were near the communities of Lightsville, Pikeville, and Jaysville, Ohio.

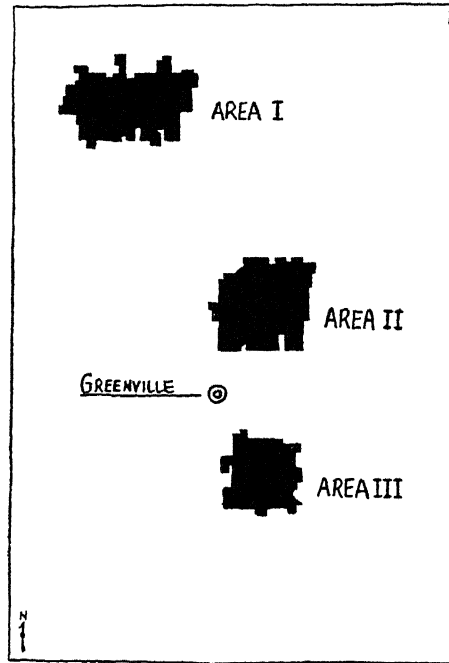


Fig. 1.—Areas studied, Darke County, Ohio

#### CHANGES IN THE SIZE OF FARM UNITS, 1937-1940

##### TOTAL CHANGES IN THE SIZE OF FARM UNITS, 1937-1940

Before discussing what relation the practice of farming additional land has had in changing the size of farming units, it should be determined what the total change in the average size of unit has been from all methods of acquiring land. Table 1 shows that the average farm unit was 89.5 acres in 1937, at the beginning of the period studied, 90.5 acres in 1940, at the close of the period, showing an increase of only 1 per cent in the amount of land per farm unit during this period.

Although farm units had increased on the average only 1 acre per unit, the change was the result of all possible alterations in units caused by splitting up and combining tracts of land in the areas studied. The size of units operated under different tenure arrangements, however, underwent considerable change

during the same period. Likewise, there was a considerable shift from 1937 to 1940 in the tenure classification of farm operators. A net total of six units, or 2 per cent of the original total, was absorbed by other farm units during the period.

TABLE 1.—Number and size of farming units, with percentage change since 1937, by tenure groups, three sample areas, Darke County, 1940

Tenure group	Number of units		Per cent change	Average size of unit (acres)		Per cent change
	1937	1940		1937	1940	
Full owners .....	108	78	-28	84.4	86.9	+ 3
Owners, part rented in .....	26	34	+31	135.0	131.9	- 2
Owners, part rented out .....	27	46	+70	40.1	31.8	-21
Share tenants, single tracts .....	120	106	-12	90.6	94.4	+ 4
Cash tenants .....	7	10	+43	75.4	71.3	- 5
Share tenants, several tracts .....	18	26	+44	126.3	142.5	+13
Total .....	306	300	- 2	89.5	90.5	+ 1

It should be remembered in studying table 1 that the area studied did not remain constant in total acreage from 1937 to 1940. A tract located within the solid block of farms studied and farmed as part of a unit in the area in 1937 might have been relinquished the following year to be farmed by an operator who had previously been farming entirely outside the area. As a result, the latter operator with his entire unit would be included, increasing the number of units by one and the total acreage by the amount of land in that part of his unit originally outside the area. Likewise, a tract located outside the area might be added to a unit in the area for only a single year and then be given up by the operator in subsequent years. The total amount of land included within 306 units in 1937 was 27,383 acres. In 1940, the amount of land in 300 units was 27,148 acres.

A further examination of table 1 shows that in 1940 as compared with 1937, there was an increase of 31 per cent in the number of owners who were renting additional land, and of 44 per cent in the number of tenants doing likewise. Thus, there was an increase of 36 per cent in the number of units renting additional land to farm. There was, likewise, a 70 per cent increase in the number of units in the group renting out land to others to operate. From table 1, it can be seen that the share tenants, eight of whom were formerly on single tracts, have since 1937 enlarged their operations by farming 13 per cent more land on the average, making the greatest enlargement of farming units of any tenure group.

#### CHANGES IN THE NUMBER OF FARM UNITS

In table 1 it was indicated that there was a net decrease of six units in the areas studied; however, this trend was not the same in each area.

In area I, which had relatively the poorest soil resources, there was a net decrease of seven units. Three owner-operators died; a fourth was imprisoned; and the land of each was added to other units in the area. The farm of one deceased operator was purchased and added to the unit of another owner operator; the other two farms were rented as additional land by neighbors.

The dwelling on the remaining unit had been destroyed by fire, so that after the tract was sold, it was divided by the new owner, and part was sold again to an adjoining owner operator, while the remaining part was rented by a tenant operator as an addition to his unit. Four tenants on single tracts were displaced, either when the farms were sold or the buildings rented to nonfarm people. The land was then rented by near-by operators as additions to their units. A new operator began farming in 1938, having purchased part of an owner-operated tract and built a new house to go with the barn already on the tract.

In area II, there was a net decrease of one unit formerly operated by a tenant.

In area III, the opposite trend was found. There was a net increase of two units. One tract, previously part of a neighbor's unit and occupied by nonfarm people, was rented for cash by a tenant operator who was employed part time in a factory. A young married couple who had formerly resided with parents rented a similar tract and established a unit of their own.

The cases just mentioned did not include all the changes that have taken place in these areas since 1937; they were the most recent ones, which at the time of the study had not been offset by subsequent changes.

The important thing revealed was that there were three fewer owner operators and three fewer tenants in the areas studied in 1940 than there were in 1937.

#### HOW ADDITIONAL LAND WAS ACQUIRED

The relative importance of different methods of acquiring additional land to farm is shown in table 2.

**TABLE 2.—Number of additional tracts operated in 1940 and acquired by renting and by purchase since 1937, three sample areas, Darke County, Ohio**

1940 tenure of operator	Number of units, 1940	Number adding tracts, 1937-1940	Number of tracts acquired by—	
			Renting	Purchase
Full owners .....	78	7	0	7
Owners, part rented in .....	34	21	18	5
Owners, part rented out <sup>§</sup> .....	46	(6)*	0	(6)*
Share tenants .....	106	0	0	0
Cash tenants .....	10	1	1	0
Share tenants, several tracts .....	26	20	24	0
Total .....	300	49	43	12

\*Number purchasing additional land; all tracts were then rented out to others to operate and are thus included in the totals elsewhere.

As indicated in table 2, only 12 tracts of the 55 acquired and added to 49 farming units were purchased. About 75 per cent of all additional land was acquired by renting. Purchased tracts were larger, averaging 52.7 acres per tract, probably because an entire farm is usually purchased, whereas only the pasture land, or even a single field, may serve as a rented tract. Rented tracts averaged 50.1 acres per tract, however. With few exceptions, the tracts acquired by purchase were small farms and unimproved tracts of land.

Although table 2 shows those additional tracts being operated in 1940 which were acquired since 1937, it does not show how many tracts were given up by the same operators during this period. The extra tracts no longer operated in 1940 but operated by them in 1937, 1938, and 1939 are listed in table 3.

**TABLE 3.—Number of additional tracts operated in 1937, 1938, and/or 1939, but no longer operated in 1940, three sample areas, Darke County, Ohio**

1940 tenure of operator	Number of units, 1940	Number giving up tracts, 1937-1940	Number of tracts given up	
			Rented	Owned
Full owners .....	78	11	6	5†
Owners, part rented in .....	34	4	5	0
Owners, part rented out .....	46	18	0	20‡
Share tenants .....	106	9*	9*	0
Cash tenants .....	10	1	1	0
Share tenants, several tracts .....	26	7	8	0
Total .....	300	50	29	25

\*Extra tracts, if any, for two operators not known.

†Five tracts away from home formerly operated with home unit.

‡All but three were fields on home tract operated by the owner.

From tables 2 and 3 it would appear that 55 tracts averaging 50.7 acres per tract were acquired by 49 farming units during the period studied, while 54 tracts averaging 48.7 acres per tract were given up. The totals are not equal, because extra tracts may have been acquired from outside the area studied or from all or part of six units which were absorbed prior to 1940.

Further inspection of the data revealed that 12 tracts were purchased; 5 tracts were sold; and 20 tracts, all but 3 of which were fields, were relinquished by owner operators and rented out to others. Thus, owner operators gave up a net of 13 extra tracts, which were acquired by neighboring tenant operators. Tenants also acquired one additional tract outside the area, making a gain of 14 tracts during the period studied. No operator attempted to farm more than four additional tracts.

Since some tracts were entire farms, while others were only fields, or part of a farm, the question arises as to the relative amounts of land involved in these shifts. Table 4 shows the gains and losses of each tenure group in terms of acres, rather than tracts.

As shown in table 4, the total net change for all owner and part owner operators, who relinquished 1,166 acres of land while acquiring 754 acres, was a net loss of 412 acres. On the other side, tenants gave up 334 acres while acquiring 904 of additional land, for a net gain of 570 acres. This gain included the 412 acres given up by the owners and 158 acres obtained from absorbed units and from outside the area, a change which indicated that tenants have recently been acquiring land from other tenure groups in Darke County. Although the average size of all farming units increased by only 1 acre from 1937 to 1940, 752 acres of land had passed from owner operation to tenant-operated units, which, together with additional acreage formerly operated by tenants, permitted tenant operators to increase the size of their units an average of 16.2 acres. Owners who operated only part of their farm and rented out the rest to others had relinquished an average of 8.3 acres per farm.

The two tenure groups that increased the amount of additional rented land farmed were the owners who were renting in part and the tenants who were



renting one or more tracts in addition to their home tract. The former group was renting 543 acres more of such land in 1940, an increase of 38 per cent; the latter group rented 884 acres more for an increase of 80 per cent.

**TABLE 4.—Changes in the amount of land operated in addition to home tracts from 1937 to 1940, by tenure groups, three sample areas, Darke County, Ohio**

1940 tenure of operator	Extra acres acquired, 1937-1940	Extra acres given up, 1937-1940	Changes in acres		Total net changes (acres)
			Gained	Lost	
Full owners:					
Owned .....	421	394	27	0	-176
Rented .....	0	203	0	203	
Owners, part rented in:					
Owned .....	211	0	211	0	+754
Rented .....	871	328	543	0	
Owners, part rented out:					
Owned .....	(445)*	990†	0	990†	-990
Rented .....	0	0	0	0	
Share tenants, single tract:					
Owned .....	0	0	0	0	-334
Rented .....	0	334‡	0	334‡	
Cash tenants:					
Owned .....	0	0	0	0	+ 20
Rented .....	40	20	20	0	
Share tenants, several tracts:					
Owned .....	0	0	0	0	+884
Rented .....	1,245	361	884	0	
All operators:					
Owned .....	632	1,384	0	752	+158
Rented .....	2,156	1,246	910	0	

\*Six tracts purchased and rented out to others (not included in totals).

†Of this total, 200 acres were away from home formerly operated with the home unit; the remaining 790 acres were fields of the home unit.

‡Former extra tracts, if any, not learned for two operators in this group.

The total net increase in rented additional land reported by operators farming in 1940 was 910 acres, an increase of 29 per cent over the amount reported by these same operators for 1937. The actual total amount of additional rented land in these areas in 1937 was not determined exactly, because some operators farming in these areas in 1937 could not be located at the time the study was made. According to neighbors of these operators and to data obtained from operators interviewed, there were at least 3,049 acres of additional rented land farmed in these areas in 1937. Since there was a total of exactly 4,025 acres of such land in 1940,<sup>3</sup> there was an increase of not more than 976 acres in the amount of rented additional land during this period, or an increase of not over 32 per cent.

#### DISTANCE OF TRACTS FROM THE HOME TRACT

Table 5 lists the number of additional tracts farmed and the distance from the home tract of those not adjoining it.

<sup>3</sup>Although 4,025 acres of additional rented land were farmed in 1940, 2,156 acres, 54 per cent, had been acquired by the operator since 1937. This was not the net increase in such land, however, because much of it was originally rented as additional land and merely passed from one tenant operator to another.

Table 5 shows that one-half the additional tracts rented by owners were adjoining the home tract but that such operators traveled as far as tenants for the remaining rented tracts. Less than a third of the additional tracts obtained by tenants adjoined the home tract, but none of these operators went more than 5 miles for additional land. Of the owned tracts away from home, the most distant was 16 miles away.

TABLE 5.—Tracts farmed away from home, by tenure groups, three sample areas, Darke County, 1940

Tenure group	Total tracts	Tracts adjoining	Number and average distance of tracts not adjoining*	
	(number)	(number)	(number)	(miles)
Full owners .....	25	13	12	4.2
Part owners:				
Tracts rented .....	44	22	22	1.2
Tracts owned .....	7	4	3	1.4
Cash tenants .....	2	0	2	.7
Share tenants .....	38	11	27	1.3
Total, all operators .....	116	50	66	1.8

\*Distance by road or lane to such tracts.

In connection with the distance of additional tracts from the home tract, figures 2, 3, and 4 represent maps of the areas studied. These maps show the tracts studied and the pattern of farm operating units in 1940. Tracts not adjoining but under the same ownership and operation are connected with arrows having only one-half the head barbed; tracts or fields farmed as rented additions to a home tract are indicated by double-barbed arrows drawn from a circle indicating the operator's home tract. A single circle indicates that the home tract was owned by the operator in 1940, and a double circle represents a home tract rented by the operator.

## WHY ADDITIONAL LAND WAS AVAILABLE TO FARMERS

### TYPES OF LANDOWNERS

A study of the tracts which were rented to nonresident operators in 1940 revealed the following distribution among different types of landowners:

TABLE 6.—Types of landowners of tracts rented to nonresident operators, three sample areas, Darke County, 1940

Type of owner	Number	Per cent of total number
Active farmers .....	26	31.0
Retired farmers and widows .....	22	26.2
Individuals not farmers .....	21	24.9
Estates of deceased persons .....	13	15.5
Financial institutions .....	2	2.4
Total .....	84	100.0

Although table 6 shows almost one-third of additional rented tracts to be owned by active farmers, 22 of the 26 tracts were owned by farmers who were no longer engaged in the production of field crops. These men were classed as

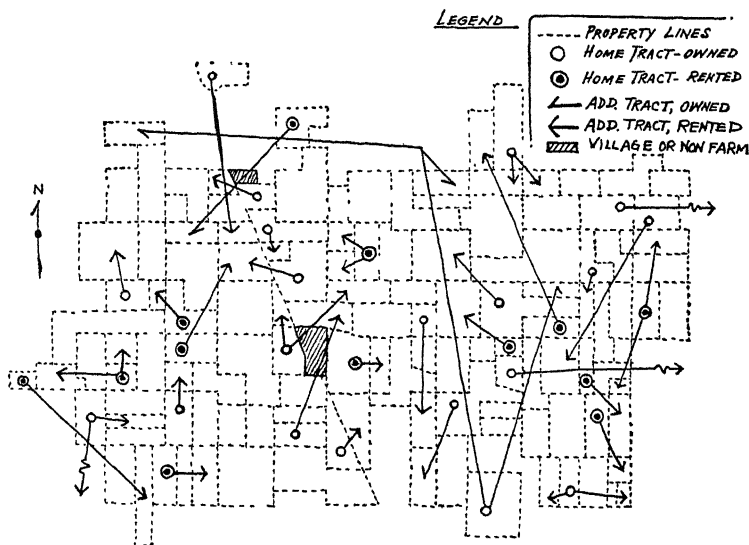


Fig. 2.—Operating farm units, area I, Darke County, Ohio, 1940

active farmers because they were still actively engaged in the production of livestock and livestock products in 1940. Many of these farmers were feeding livestock from their share of crops grown under a share agreement by men to whom they rented their fields. Only men who had ceased farming were classed as retired. A few such men had moved to town and had either rented the buildings to nonfarm people or had left them vacant. Other retired farmers or the widows of former operators still resided on the farm but were not listed as actively farming even though they kept a cow and a few chickens.

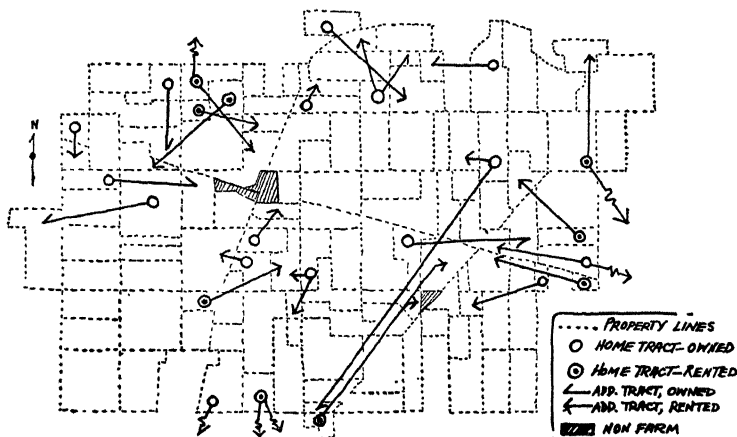


Fig. 3.—Operating farm units, area II, Darke County, 1940

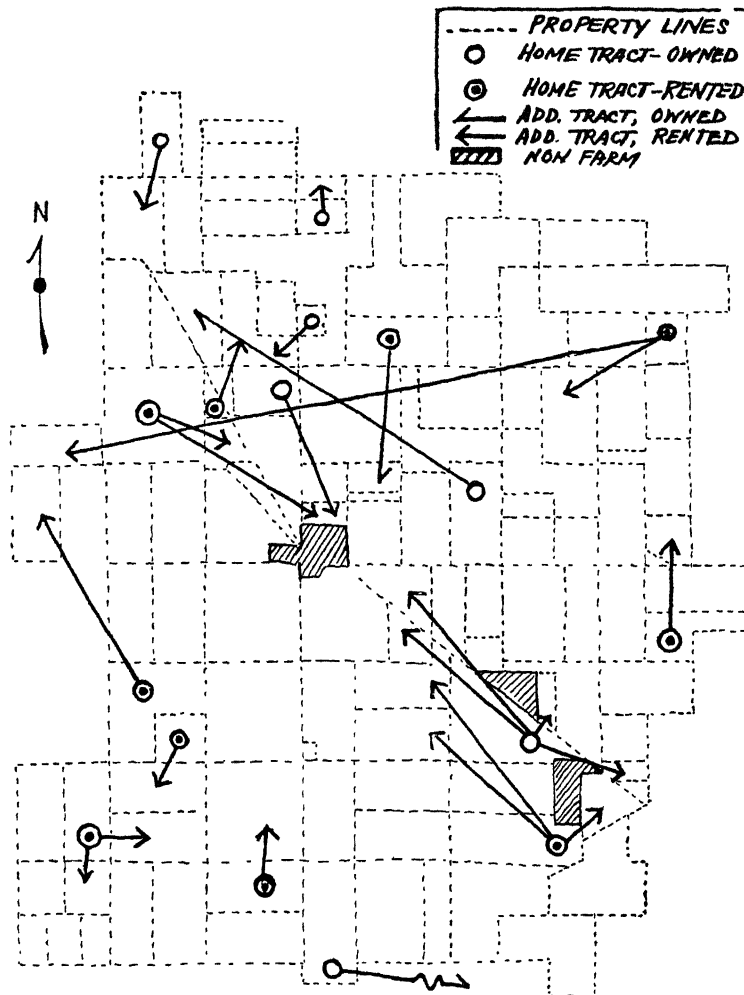


Fig. 4.—Operating farm units, area III, Darke County, 1940

Although 31 per cent of tracts farmed by nonresident operators were owned by active farmers, a survey of all land in the areas studied revealed that active farmers owned 48 per cent; retired farmers and widows, 24 per cent; individuals not farmers, 21 per cent; estates, 6 per cent; and financial institutions, 1 per cent.

From these data, it was evident that land owned by persons not actively farming was relatively more apt to be available to a nonresident operator. Likewise, farms which were part of estates in the process of settlement were apt to be available to a nonresident operator because of prospective short tenure of residence.

CONDITION OF BUILDINGS ON ADDITIONAL TRACTS FARMED  
BY NONRESIDENT OPERATORS, 1940

An attempt was made to determine whether tracts farmed as additional land by nonresident operators were less desirable as a place of residence. The data obtained are presented in table 7.

TABLE 7.—Condition of buildings on home tracts and on tracts farmed entirely or in part by nonresident operators, three sample areas, Darke County, 1940

Condition of buildings	On home tracts	On added tracts
	Per cent of total number	Per cent of total number
Good .....	60.8	41.1
Fair .....	29.0	31.5
Poor .....	9.8	13.7
None .....	.4*	13.7
Total .....	100.0	100.0

\*Two home tracts had no barn.

Only 40 per cent of such additional tracts had buildings in good condition. On the other hand, 61 per cent of all buildings located on home tracts were in good condition in 1940, and less than 1 per cent of all home tracts lacked barns.

Of the 72 houses found on 84 rented additional tracts in 1940, 9 were vacant and 8 were rented to nonfarm people. In addition, 46 were owned and occupied by farmers who were renting one or more fields to other farmers. Of these 46 dwellings, 26, 56 per cent, were in good condition, only slightly below the proportion of good houses on the home tracts of operators who were not renting any land out to others. An additional nine homes were owned and occupied by widows and other nonfarm people.

#### AGE OF FARM OPERATORS

In connection with the increasing number of partially retired and retired farmers indicated by the data, it was thought desirable to investigate the ages of operators found in each tenure group. Table 8 shows the number and average age of operators in each group.

TABLE 8.—Number and average age of farm operators, by tenure groups, three sample areas, Darke County, 1940

Tenure group	Number	Age
Full owners .....	78	54
Owners, part rented in .....	34	50
Owners, part rented out .....	46	61
Share tenants, single tracts .....	106	40
Cash tenants .....	10	43
Share tenants, several tracts .....	26	37
Total .....	300	47

As might be expected, tenants as a whole were considerably younger than the average for other operators. Share tenants who were renting more than one tract were even younger, averaging only 37 years of age. The average

ages for owners and part owner operators were all over 50 years, and the owners who were renting out part of their farm to other farmers averaged 61 years of age.

#### WHY FIELDS WERE RENTED TO OTHERS

When the 46 operators who were renting out part of their farms to others were asked the chief reason why they had made part of their farm available to others in 1940, 41 per cent replied that their inability because of old age or ill-health to do the field work connected with the production of crops had resulted in their action. An additional 33 per cent reported that business and other interests off the farm kept them too busy. Nine per cent reported they did not have the necessary tools and equipment. Seven per cent reported that they were renting out part of their land only temporarily, either because of a death or serious illness in the family, or pending settlement of an estate. The remaining 10 per cent gave miscellaneous reasons, such as lack of farm labor, ownership of extra land only as an investment, and unwillingness to permit tenants to occupy the farm buildings, so that the alternative was to rent out only the fields. Some of the older men commented that by "renting out their fields on shares" they still held a measure of control over their land.

#### WHY FARMERS GAVE UP TRACTS FORMERLY OPERATED

Operators who had farmed additional tracts in 1937 to 1939 but not in 1940 were asked to explain why such tracts were given up and thus made available to other farmers. Their reasons have been classified and listed in table 9.

TABLE 9.—Why tracts formerly rented were given up,  
three sample areas, Darke County, 1937-1940

Reasons given	Number of replies	Per cent of total number
Tract was sold, had to give it up.....	24	31.6
Owner or his relative wanted tract.....	13	17.1
Want a larger and/or better tract.....	11	14.4
Miscellaneous reasons*.....	11	14.4
Purchased and moved onto own farm.....	6	7.9
Too busy to farm it any longer.....	5	6.7
No reason given.....	6	7.9
Total.....	76	100.0

\*Miscellaneous reasons included: "Owner rented tract to a resident tenant"; "I quit tract because of ACP farm program"; owner hesitated to talk business so I rented another to be sure of extra land"; "tract too far away for my steel tractor rims on tarvia road"; "no water available"; and "owner charged me extra for pasture."

#### WHY ADDITIONAL LAND WAS SOUGHT

It has been shown that nearly 75 per cent of all additional land farmed was obtained by renting, also that a total of 63 operators were farming 84 such tracts as additions to their farming unit. These operators were asked the chief reason that had influenced them to rent such additional land to farm. Although 17 of the 84 tracts, or 20 per cent, had been rented and farmed as part of the same unit for 10 years or more, over 50 per cent of the 84 tracts had been added to a new unit since 1937, so that in most cases, farm operators were asked for details concerning a decision made by them only 1 to 3 years past. Table 10 lists the replies of these farmers in the order of the frequency with which they were given.

In table 10 it is indicated that almost one-half reported renting additional land either because they wished to avoid idle factors of production or because they needed more feed, pasture, or cropland. Twenty-seven per cent of the total replied that they farmed extra land chiefly to accommodate a neighbor or relative who because of advanced age, illness, death in the family, or loss of help, could no longer farm it. The remainder gave either replies of a miscellaneous nature or no reason at all. Table 10 also shows that operators who owned their home farm reported farming away from home as an accommodation twice as often as did operators who were renting their home tract. Those who reported farming away from home in search of more income were, but for a single exception, tenants on their home tract.

TABLE 10.—Reasons why additional land was rented, three sample areas, Darke County, 1940

Farmers' replies	Number of operators			Per cent of total
	Owners	Tenants	Total	
1. Try to keep ourselves, our help, and our machinery busy..	6	8	14	22
2. Need for more feed, pasture, and/or land; larger unit sought.....	7	6	13	21
3. Accommodate a neighbor unable to farm .....	7	3	10	16
4. Needed more income from our farm operations .....	1	6	7	11
5. Accommodate a relative unable to look after it .....	5	2	7	11
6. Bought or inherited a farm, continue on tract previously rented .....	3	1	4	6
7. Lost barn by fire, need more shelter .....	1	0	1	2
8. No reply given .....	4	3	7	11
Total.....	34	29	63	100

Of the seven additional tracts owned and operated by the part owner tenure group, five had been operated 10 years or longer. The reasons for their acquisition were not learned. The same was true of 25 tracts owned away from home by operators who were renting no additional land in 1940. Sixteen of these tracts, or 64 per cent, had been operated for 10 years or more by the owner.

#### LABOR AND EQUIPMENT AVAILABLE

In connection with the reasons given by 63 operators for farming additional land, it was revealed, as shown in table 10, that 22 per cent did so to avoid having labor and equipment idle. The relative amounts of these available in 1940 were investigated for each tenure group. From the standpoint of labor supply, it was found that the two groups renting additional land had considerably more labor available per farm, including family operator and hired labor, than was the average situation of all farms. The group of owners who were renting additional land in 1940 had available 3.2 man-months more labor per farm, and the tenants renting additional land, 3.7 man-months more, than the average farm.

Some data were obtained relative to the use of rubber-tired farm equipment by each tenure group. The percentage of the total number of operators in each tenure group using such farm equipment is shown in table 11.

From table 11 it would appear that full owners and the share tenants on single tracts had nearly as many tractors of all types available as did the groups renting additional land, but that the latter groups had relatively twice

as many tractors mounted on rubber tires and many more auxiliary tools similarly equipped than did the former groups. In general, the groups farming away from home were much better equipped to do so.

TABLE 11.—Per cent of total number of farming units having specific types of equipment, by tenure groups, three sample areas, Darke County, 1940

Tenure groups	Tractors, all types	Tractors, rubber-tired	Trucks	Trailers	Other implements on rubber tires*
Full owners .....	58	28	10	46	9
Owners, part rented in .....	79	41	18	44	15
Owners, part rented out .....	26	9	0	17	2
Share tenants, single tracts .....	72	28	2	48	8
Cash tenants .....	40†	20	0	30	0
Share tenants, several tracts .....	92	65	12	39	23
All farms .....	63	30	6	41	9

\*Other equipment included wagons, pickers, combines, balers, rakes, mowers, shredders, spreaders, and plows.

†Some operators hired considerable work done on a custom basis.

#### METHODS OF RENTING ADDITIONAL LAND

Of the 84 additional rented tracts, 78, or 93 per cent, were rented on a crop-share basis; 6 per cent were rented for cash; and in one instance, the crop-land of a tract was rented on a share basis and cash was paid for the remaining pasture land. In no case did the length of lease for additional land away from home exceed 1 year. Likewise, only 2 per cent of such renting agreements were reported to be in writing.

Some knowledge of how much, if any, these methods differed from the renting methods ordinarily used in the communities studied can be learned from table 12.

TABLE 12.—Methods of renting land, three sample areas, Darke County, Ohio, 1940  
(Per cent of total tracts)

Method of renting	Tracts away from home	All tracts
Crop share* .....	93	86
Crop share and cash .....	1	1
Cash .....	6	9
Crop and livestock share .....	0	4
Total .....	100	100

\*A total of 197 tracts was reported as returning one-half of the crops to the landowner as rent; two tenants reported a share of two-thirds for the owner, who furnished everything except labor; only one tenant reported returning two-fifths to his landlord.

The methods used to rent additional land in 1940 evidently were not greatly different from the methods customarily used in these communities.



## LENGTH OF TENURE

When it has been determined why additional tracts were acquired and given up by farm operators, it becomes desirable to know something of the length of time that tracts were held and farmed. Table 13 shows the length of tenure for 416 tracts farmed as part of 300 farm units in 1940, as well as tracts which were formerly part of these units during the period 1937 to 1939 but were no longer farmed with the unit in 1940. The data for tracts formerly operated are especially significant, because they deal with a complete tenure period; that is, the time from acquisition to the year in which they were given up is definitely known. On the other hand, attempts to express the length of tenure on tracts still occupied may be distorted, because the present operator may remain there for many years, and the length of tenure on that tract, if measured in the future, would be for a longer period.

TABLE 13.—Length of tenure on 416 tracts, three sample areas,  
Darke County, 1940  
(Years)

Tenure groups	Additional tracts operated in 1940		Tracts formerly operated, 1937-1939		All tracts operated in 1940
	Owned	Rented	Owned	Rented	
Full owners .....	14.4	.....	3.6	6.1	15.6
Owners, renting part in .....	9.8	6.7	6.0	4.3	9.4
Owners, renting part out .....	.....	.....	20.5	.....	20.1
Share tenants, single tract .....	.....	.....	.....	3.1	7.8
Cash tenants .....	.....	3.0	.....	1.6	7.5
Share tenants, several tracts .....	.....	4.5	.....	4.6	5.8
Total .....	13.2	5.6	14.3	3.8	11.1

In studying table 13, it should be remembered that tenants as a whole averaged only 40 years of age, and that those renting additional land were even younger. As these tenant operators grow older, the tendency will be, no doubt, for tenure periods to become longer. In the case of tracts formerly operated, however, the data showing that share tenants had formerly farmed a total of 40 tracts for an average period of only 3.1 years indicate that in recent years, such short tenancy must have been associated with some serious problems for those operators.

## SUMMARY AND CONCLUSIONS

According to data obtained from the operators of 300 farming units in three sample areas of Darke County, Ohio, for the period 1937 to 1940, the average farm unit had increased in size from 89.5 acres to 90.5 acres. During the same period, however, the number of owners who were renting some additional land to farm increased 31 per cent, and the number of tenants who were doing likewise increased 44 per cent. From 1937 to 1940, the increase in number of farm units which included some additional rented land was 36 per cent, and the number of farmers who were renting out part of their farms to others increased by 70 per cent, advancing from 27 in 1937 to 46 in 1940. Share tenants who were renting more than one tract of land accomplished the most important increase in size of farm units, gaining, on the average, 16.2 acres

per farm unit. A net of 752 acres of land passed from owner operation in 1937 to tenant operation in 1940. This, together with land formerly operated by other tenants, made a total increase of 910 acres in the amount of land being operated as additions to farming units. These changes resulted in there being three fewer owner operators and three fewer tenants in the areas studied in 1940 than there had been in 1937.

It was found that 75 per cent of additional land was obtained by renting. One-half of such tracts farmed by owners were adjoining their home tract; the remainder were, on the average, only 1.3 miles distant. Only one-third of such tracts farmed by tenants adjoined the home tract, but the remainder were approximately the same distance away as those of the owners. Twelve tracts away from home farmed by full owners who rented no additional land were farther away, averaging 4.2 miles distant. Nobody farmed a tract farther away than 16 miles, and there were no rented tracts more than 5 miles from a home tract.

Of the 84 tracts rented to nonresident operators, 14 per cent were not improved with buildings, and less than one-half the buildings on the remaining tracts were in good condition. Of the 46 farms of which part had been rented out to others, 56 per cent had buildings which were in good condition, practically as many as found on owner-operated units, where 61 per cent were classified as good.

It was found that land owned by persons not actively farming was most apt to be available to a nonresident operator. Likewise, a considerable amount of such land was made available by older farmers who wished to feed their share of the crops to livestock but who no longer were able to engage in the field work connected with the production of crops. In fact, 41 per cent of the 46 operators in this group reported that they were forced to rent out some of their land because of old age or ill health; another 33 per cent stated they were too busy with other interests to farm their own fields; 9 per cent had no tools with which to farm; and 7 per cent gave miscellaneous reasons.

Reasons given by 63 operators for renting additional land reflected a desire for more feed, pasture, cropland, and/or income. Equally important was the desire to keep themselves, their help, and their machinery busy, along with a willingness to farm some extra land to accommodate neighbors or relatives unable to do so.

In the case of tracts formerly operated, but relinquished prior to 1940, almost one-half were reported given up because they had either been sold or taken over by the owner or one of his relatives. About 15 per cent were given up as the result of an opportunity to get a better tract. The remaining reasons given were of a miscellaneous nature.

Ninety-three per cent of additional tracts were rented on a crop-share basis; 6 per cent were rented for cash; and the remainder by a combination of both methods. In no case did the length of lease exceed 1 year. It was indicated that the crop-share method of renting was customary in the areas studied, and many of the older farmers expressed the opinion that by renting out their land for a share of the crops, they were able to retain a measure of control over their land.

The data revealed that men who were farming additional rented land were relatively better equipped with machinery on rubber tires than those farming

entirely at home. Likewise, these same operators had available, on the average, between 3 and 4 more man-months of labor, including family and hired labor, than was the average situation on all farms.

In general, the period of tenure on owned tracts was about twice that for rented tracts, but tenants were considerably younger men, averaging 40 years of age compared with 54 and 61 years for owner groups. It was evident, however, in the case of 40 tracts formerly operated by these tenants for an average tenure period of only 3.1 years that they as operators had faced some serious problems in recent years which were, no doubt, associated with such short tenancy.

A study of the pattern of farming units as shown in figures 2, 3, and 4 revealed that many operators were farming extra land which either adjoined their unit or was as near to their unit as to the home unit of any other operator farming extra land. An exception to this situation was noted in both areas I and II, where several operators could have obtained adjoining tracts to farm by exchanging their outlying tracts with each other. Such a change would help to improve the efficiency of these farming units.

In view of the fact that since 1937, in the areas studied, the number of farmers renting out only part of their land to others increased by 70 per cent, it is indicated that recently, many operators on reaching retirement age have remained on their farms instead of moving to town and making their entire unit available to another operator. This condition has made it increasingly difficult for new operators to get established on the land.

#### APPENDIX, CHANGES IN THE AMOUNT OF LAND FARMED PER UNIT IN HANCOCK COUNTY

The study in Hancock County was almost the same in procedure and objectives. The sample farms were located, however, in each of three different land use areas, which had been designated and mapped by local committees before the study was begun. One objective was to determine what differences, if any, there were between these land use areas.

It was learned that in all three areas, the average size of farm had increased from 121.1 acres in 1937 to 125.0 acres in 1940. In area I, which included land rated above average in productivity, 103 units averaged 124.2 acres in 1937, whereas the same area was farmed in 100 units averaging 128.5 acres in 1940. In area II, on land of average productivity, 105 units in 1937 averaged 102.2 acres; in 1940, 100 units averaged 107.3 acres. In area III, on land below average, 101 units averaged 137.8 acres in 1937, and 100 units averaged 139.3 acres in 1940. Thus, there were nine fewer units in the sample areas in 1940. The greatest decrease was in the area where farms had been smallest in 1937.

The most recent changes in area I resulted in a net decrease of two tenant-operated units by 1940. One tenant operator died, and another was displaced when his landlord rented the land to a nonresident operator and the buildings to a factory worker. One owner operator quit farming and moved to town.

In area II, where units were smallest in 1937, there was a net decrease of five units. One owner operator died; another quit farming to take a job in town; and five retired from farming and moved off the farm. Two of these farms were rented as units to new tenants, making a net decrease of five units.

In area III, two former tenants purchased land and became owner and part owner operators, while another owner operator lost his farm through foreclosure, resulting in a loss of one unit.

Although it was observed that in areas I and III, especially, several units might gain more efficiency by exchanging outlying tracts for others nearer the home tract, it was found that there had been much less exchanging of tracts among operators than in Darke County. In Hancock, 83 per cent of all additional land was still being operated in 1940 by the same man who had farmed it in 1937. In Darke, however, only 46 per cent was still farmed by the same operator in 1940.

In the case of tracts farmed away from home, the average distances to tracts not adjoining home tracts were as follows:

For owner and part owner operators—area I, 1.3 miles; area II, 1.8 miles; area III, 2.8 miles.

For tenant operators—area I, 2.3 miles; area II, 5.1 miles; area III, 1.5 miles.

No operator was found farming more than six tracts, and no owner or part owner was farming any land more than 6 miles from a home tract. One tenant operator, however, farmed a tract 17 miles distant.

Although the average size of unit for tenure groups, with the exception of cash tenants, increased from 1937 to 1940, the increase was small in all but two groups. The owner operator group increased units an average of 7.2 acres, and the part owner operators increased theirs an average of 5.9 acres per unit.

Of the 1,396 acres of additional land added to units since 1937, the owner operators and part owner operators acquired 964 acres, or 70 per cent of the total. During the period 1937-1940, a total of 1,008 acres was given up by operators, so that the net increase in amount of additional land farmed was 388 acres.

A total of 340 acres was acquired by purchase to add to units of owner and part owner operators. In contrast, 346 acres were made available by former owner operators who decided to rent out part of their farm to neighbors. It was still customary, however, for many farmers in Hancock County, upon reaching retirement age, to cease farming entirely and move off the farm, rather than to reside in the buildings and depend on a neighbor to farm the fields each year.